



Department of Psychiatry

NEUROPSYCHOLOGICAL ASSESSMENT REPORT

Confidentiality and Use of Assessment Results

This is a strictly confidential report on the person referenced below, and it is prohibited to copy, distribute, or reveal the contents of the report to those not authorized and without consent of the person or his/her parent/guardian if it is a minor.

This evaluation has a very specific purpose (See Referral Reason), and the results of the evaluation are based on a careful, specialized, and rigorous analysis of all information gathered about the person, and not only test scores. The results of this evaluation should not be used for any other purpose beyond what is stated in the referral reason, and test-scores ought not to be re-interpreted beyond the manner in which they are presented here.

Context of the assessment

The majority of tests used are constructed and standardized on people in the USA or Europe, and compare the test-taker to people in those countries, unless otherwise indicated. These cultural and language differences are taken into consideration when selecting measures, interpreting results, and concluding impressions and recommendations.

Current testing was administered in Arabic and English, with specific changes in standardized methods.

IDENTIFICATION

Name: L [REDACTED] U [REDACTED]

Date of Birth: [REDACTED]

Date of First Visit: 15/12/2023

Date of Assessment: 21/12/2023

Age: [REDACTED]

Primary Language: English

Country of Origin: Lebanon

MRN#: [REDACTED] 54

Psychologist: Anita Alalam, Clinical Neuropsychologist

REASON FOR EVALUATION

U is a 15-year-old male diagnosed with an Attention Deficit/Hyperactivity Disorder (ADHD) by Dr. Fadi Maalouf. The school is requesting this neuropsychological assessment to acquire his intellectual profile, aiming to complement the previous Tova test results and obtain a comprehensive report on U's overall profile.

RELEVANT HISTORY

U resides in K with his parents and his 4 older siblings. English is the primary language spoken at home. During the initial appointment, his father provided the following information.

Early and medical history: U was born following a full-term pregnancy and his birth experience was unremarkable. Hearing is reported as typical, and he has a slight myopia.

Developmental milestones: typical motor, speech, and social milestones as reported by the father.

Family medical history: two of U's siblings have an Attention Deficit/Hyperactivity Disorder.

Educational History: U is currently a 10th-grade student at the American Community School (ACS) of Beirut. His academic journey in the earlier years did not involve any reported difficulties in reading, writing, or mathematics, according to his father. Presently, U maintains good grades and successfully manages all subjects. Before receiving accommodations for exams, his father has observed potential anxiety symptoms, particularly before school, especially in situations involving exams or timed tasks.

Social and psycho-affective aspects: U, as described by his father, is a highly sociable individual at school, enjoying popularity among his peers. His active involvement in various sports has led him to be part of different groups, despite his somewhat shy nature. On the other side, U is characterized as moody and prone to easily being angry.

Interests and hobbies: U takes pleasure in engaging in a variety of sports, including swimming, fitness, horseback riding, karate, and most notably, basketball, where he aspires to become a professional player. Beyond his athletic pursuits, U is a member of the finance club at school and demonstrates a keen interest in business.

Medication: Since June of this year, U has been taking Ritalin as a medication for his ADHD, and he has not experienced any side effects.

Sleep and nutrition: As U aims to become a professional basketball player, he is maintaining a healthy diet and ensuring sufficient sleep.

BEHAVIORAL OBSERVATIONS

U's physical appearance was unremarkable, despite a broken leg that occurred while playing basketball. Throughout the assessment, he actively engaged in the presented activities and demonstrated ease in following instructions. Furthermore, while on medication for his ADHD, there were no signs of fidgetiness or hyperactivity, and he sustained attention throughout the 2-hour evaluation, with only minor signs of impatience toward the end.

In terms of interpersonal interactions, U consistently maintained good eye contact, exhibited reserved behavior and engaged in conversations appropriately.

ASSESSMENT TOOLS

- Interview with the father
- Wechsler Intelligence Scale for Children- Fifth Edition (WISC-V)
- Direct observation

MAIN FINDINGS AND DIAGNOSES

Refer to the appendix for detailed test results

The intellectual profile of U is heterogeneous but generally falls within the expected range for his age (47th percentile).

In terms of **fluid reasoning**, U's performance fell within the high average range compared to his age group. On the Matrix Reasoning subtest, which requires logical pattern analysis, he demonstrated excellent abilities in recognizing and applying abstract rules, patterns, and visual relationships. Moreover, on the Figure Weights subtest, which assesses quantitative and analogical reasoning and involves the analysis of visual information and principles related to balance and proportion, U's scores were in the average range.

U's performance on **oral language** tests fell within the average range. In a task requiring the identification of similarities between two words, his scores indicated sufficient verbal abstraction skills. Moreover, his scores were also in the average range when he was asked to define words, indicating a good vocabulary pool (Vocabulary).

In terms of **visual-spatial ability**, U's score fell in the average range. More precisely, while recreating a model using colored blocks, he demonstrated appropriate spatial analysis and motor planning skills (Block Design). In addition, when he had to mentally arrange pieces of a puzzle to complete a specific design, he displayed appropriate visual-spatial skills and was able to identify patterns and relationships in abstract designs (Visual Puzzles).

U's results showed an efficient **working memory** (holding on to information mentally and manipulating it). During a task that involved recalling sequences of spoken digits in various orders

(backward, ascending order), which assesses **auditory working memory**, he achieved scores in the average range (Digit Span Backward; Number Sequencing). However, on a task where he had to remember visual information in the correct order (Picture Span), which targets his **visual working memory**, L■■■■'s scores were in the low average range.

L■■■■ exhibited a **processing speed** (PSI) score in the impaired range, suggesting challenges in rapidly and accurately processing visual information and responding to visual stimuli under time constraints.

In conclusion, L■■■■'s intellectual profile falls within the average range for his age. He exhibits excellent fluid reasoning skills, appropriate oral language skills, and visual-spatial reasoning abilities, complemented by an efficient auditory working memory. However, he encounters challenges in his visual working memory and processing speed. These difficulties in executive functions align with L■■■■'s previous diagnosis of Attention Deficit/Hyperactivity disorder (ADHD).

Recommendations: To optimize L■■■■'s performance in school exams, it is crucial to implement the following accommodations: extended time (50% additional time), a quiet testing environment, and breaks during evaluations. These adjustments are necessary due to significant weaknesses in his processing speed and attention difficulties.

We remain available for any further information to L■■■■'s family, or to others who work with him, upon request and appropriate permission.



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APPENDIX
DETAILED TEST SCORES

<i>Standardized Scores</i>	<i>Average Range of Scores (within age expectation)</i>
<i>Scaled Score (ScS)</i>	8 to 12
<i>Standard Score (SS)</i>	90 to 109
<i>T-score (T)</i>	43 to 56
<i>z-score (z)</i>	-0.67 to +0.67
<i>Percentile (%ile)</i>	25 to 75

Wechsler Intelligence Scale for Children, Fifth Edition (WISC-V)

Scale	Subtest	Standard Score	Percentile	Range
Verbal Comprehension index	Similarities	9	30%	Average
	Vocabulary	8		
Visual-Spatial Index	Block Design	10	55%	Average
	Visual Puzzles	11		
Fluid Reasoning Index	Matrix Reasoning	15	88%	High Average
	Figure Weights	11		
Working Memory Index	Digit Span	11	27%	Average
	Picture Span	6		
Processing Speed Index	Coding	5	3%	Impaired
	Symbol Search	5		
Full Scale		99	47%	Average